generating a sequence of gating digital signals;

setting a length of the gating digital signals equal to the delay d;

selecting a character polarity of the gating digital signals to coincide with a polarity of a previous character of the exact copy; and

delaying a beginning of the gating digital signals relative to an end of the character of the exact copy of the pseudo-random sequence by a value equal to d/2.

2. A method as claimed in claim 10, wherein the input signal correlation is performed separately for the exact copy of the input signal, for the difference copy of the input signal and for the sequence of the gating digital signals; the correlation results are stored in corresponding quadrature accumulators; the discriminator signal is formed as $I_{E-L}I_P + Q_{E-L}Q_P$, where I_{E-L}, Q_{E-L} are in-phase and quadrature components of the results of correlation of the input signal with the difference copy signal, I_P, Q_P are in-phase and quadrature components of the results of correlation of the input signal with the exact copy signal, the method further comprising:

comparing value of the accumulators containing the results of correlation of the input signal, with the sequence of gating digital signals $I_k^2 + Q_k^2$, with a threshold value of detection of a multipath effect; and

compensating the multipath effect in excess of the threshold value by adding output value of the accumulators of gating digital signals to output value of the corresponding quadrature accumulators of the difference copy to produce a discriminator signal in the form:

$$\mathbf{I_{E-L}I_P + Q_{E-L}Q_P + I_kI_P + Q_kQ_P}.$$

3. A method of increasing noise immunity during reception of signals from satellites of navigational systems comprising:

decoding signals having a carrier coded with a pseudo-random sequence;

generating an early copy of an input signal;

generating a late copy of an input signal, wherein a delay d between the early and late copy of the input signal makes up a fractional part of a character of the pseudo-random sequence;

generating a sequence of gating digital signals;

setting a length of the gating digital signals equal to the delay d;

selecting a character polarity of the gating digital signals to coincide with a polarity of a previous character of an exact copy of the input signal; and

delaying a beginning of the gating digital signal relative to an end of the character of the exact copy of the pseudo-random sequence by a value equal to d/2.

4. A method as claimed in claim 11, further comprising, when tracing the delay of the code:

determining a value of the discriminator signal as: $I_E^2 + Q_E^2 - I_L^2 - Q_L^2$;

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comparing a value of the accumulators storing the correlation results of the input signal with a sequence of gating digital signals $I_K^2 + Q_K^2$ with a threshold value of detection of a multipath effect; and

compensating the multipath effect exceeding the threshold value by adding the value from the output of the accumulators to the calculated value of the discriminator to equal $I_E^2 + Q_E^2 - L_E^2 - I_L^2 - Q_L^2 + I_K^2 + Q_K^2$.

5. A device for reception of signals of satellite navigational systems transmitting a plurality of signals with a carrier, coded by pseudo-random sequences, comprising:

a radio module receiving the input signal, converting the input signal into an intermediate-frequency signal, including a plurality of signals with an intermediate frequency carrier, coded by a pseudo-random sequence;

an analog-to-digital converter, converting the intermediate-frequency signal into a digital signal;

a multichannel digital correlator whose each channel decodes one of the plurality of signals coded by pseudo-random sequence;

a first generator which produces an exact copy of the signal coded by a pseudo-random sequence;

a second generator which produces a difference copy of the signal coded by the pseudo-random sequence, wherein a delay d between an early copy and a late copy of the signal makes up a fraction of a character of the pseudo-random sequence, and which generates a sequence of gating digital signals, wherein a length of the gating digital signals is equal to the delay d, a polarity of the character of the gating digital signals coincides with a polarity of the previous character of the exact copy of the signal coded by the pseudo-random sequence and a beginning of the gating digital signals is delayed relative to an end of the character of the exact copy of the pseudo-random sequence by a value equal to d/2.

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6. A device for reception of signals of satellite navigational systems transmitting a plurality of signals with a carrier, coded by pseudo-random sequences, comprising:

a radio module receiving the input signal, converting the input signal into an intermediate-frequency signal, including a plurality of signals with an intermediate frequency carrier, coded by [the] a pseudo-random sequence;

an analog-to-digital converter, converting the intermediate-frequency signal into a digital signal;

a multichannel digital correlator whose each channel decodes one of the plurality of signals coded by pseudo-random sequence,

wherein each channel of the multichannel digital correlator comprises:

a first generator of an exact copy of the signal coded by a pseudo-random sequence;

a second generator of a difference copy of the signal coded by the pseudo-random sequence, wherein a delay d between an early copy and a late copy makes up a fraction of a character of the pseudo-random sequence;

a third generator producing a sequence of gating digital signals, wherein a length of the gating digital signals is equal to the delay d, a polarity of a character of the gating digital signals coincides with a polarity of previous character of the exact copy of the signal coded by the pseudo-random sequence and a beginning of the gating digital signals is delayed relative to an end of the character of the exact copy of the signal coded by the pseudo-random sequence by a value equal to d/2.

7. The device as claimed in claim 6, further comprising:

a first mixer performing multiplication of quadrature counts of the input signal by counts of the exact copy of the signal coded by the pseudo-random sequence;

a second mixer performing multiplication of the quadrature counts of the input signal by counts of the difference copy;

a third mixer performing multiplication of the quadrature counts of the input signal by counts of the sequence of gating digital signals;

quadrature accumulators accumulating results of the multiplication performed by the first, second and third mixers; and

a device adjusting the delay of the exact copy of the signal coded by the pseudo-random sequence depending on an error signal from an output of a discriminator calculated on a basis of counts of the accumulators as $I_{E-L}I_P + Q_{E-L}Q_P + I_K I_P + Q_K Q_P$ provided that a threshold of detection of a multipath signal is exceeded, where I_p, Q_p are in-phrase and quadrature components of results of correlation of the input signal with the exact copy signal; I_{E-L}, Q_{E-L} are in-phrase and quadrature components of results of correlation of the input signal with the difference copy signal; and I_k, Q_k are in-phrase and quadrature components of results of correlation of the sequence of gating digital signals.

8. A device for reception of signals of satellite navigational systems transmitting a plurality of signals with a carrier, coded by pseudo-random sequences, comprising:

a radio module receiving the input signal, converting the input signal into an intermediate-frequency signal, including a plurality of signals with an intermediate frequency carrier, coded by [the] a pseudo-random sequence;

an analog-to-digital converter, converting the intermediate-frequency signal into a digital signal;

a multichannel digital correlator whose each channel decodes one of the plurality of signals coded by pseudo-random sequence,

wherein each channel of the multichannel digital correlator comprises:

a first generator producing an early copy of a signal coded by a pseudo-random sequence;

a second generator producing a late copy of the signal coded by the pseudo-random sequence, wherein a delay d between the early and late copies makes up a fraction of a character of the pseudo-random sequence;

a third generator producing a sequence of gating digital signals, wherein a length of the gating digital signals is equal to the delay d, a polarity of a character of the gating digital signals coincides with a polarity of previous character of an exact copy of the signal coded by the pseudo-random sequence and a beginning of the gating digital signals is delayed relative to an end of the character of the exact copy of the signal coded by the pseudo-random sequence by a value equal to d/2.

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9. The device as claimed in claim 12, wherein

a value of the signal of the discriminator for the device adjusting the delay is determined as $I_E^2 + Q_E^2 - I_L^2 - Q_L^2$, and

the value of the accumulators, which store results of correlation of the input signal with the sequence of gating digital signals $I_k^2 + Q_K^2$, is compared with [the] a threshold value and, if a detected multipath effect exceeds the threshold value, output values of the accumulators are added to the determined value of the signal of the discriminator to equal $I_E^2 + Q_E^2 - I_L^2 - Q_L^2 + I_K^2 + Q_K^2$.

Please add the following new claims 10-14

--10. The method as claimed in claim 1, further comprising:

affecting correlation of the input signal, the input signal comprising a direct signal and a plurality of delayed multipath signals, with the exact copy and with a signal representing a mixture of the difference copy and the sequence of the gating digital signals;

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storing results of the correlation in accumulators; and

forming a discriminator signal, for tracing a delay of the code, in a form of $I_{E-L+K}I_P + Q_{E-L+K}Q_P$, I_{E-L+K}, where Q_{E-L+K} are in-phase and quadrature components of the results of correlation of the input signal with the signal representing the mixture of the difference copy and the sequence of the gating digital signals, and I_P, Q_P are in-phase and quadrature components of the results of correlation of the input signal with the exact copy of the in-put signal,

thereby performing the adjustment of the exact and difference copy of the input signal based on the discriminator signal so that an error signal is influenced only by the input signal of direct visibility and is not influenced by multipath signals.

11. The method as claimed in claim 3, further comprising:

affecting correlation of the input signal, the input signal comprising, a direct signal and a plurality of delayed multipath signals, with the early copy;

affecting correlation of the input signal with the late copy;

affecting correlation of the input signal with a signal representing a sequence of gating digital signals;

storing the correlation results in accumulators; and

generating a discriminator signal, for tracing a delay of the code, in a form of $I_E^2 + Q_E^2 - I_L^2 - Q_L^2 + I_K^2+Q_k^2$, where I_E, Q_E are in-phase and quadrature components of the results of correlation of the early copy of the input signal, I_L, Q_L are in-phase and quadrature components of the results of correlation of the late copy of the input signal, and I_K, Q_K are in-phase and quadrature components of the results of correlation of the sequence of the gating digital signals.

12. The device as claimed in claim 5, further comprising:

a first mixer performing multiplication of quadrature counts of the input signal by counts of the exact copy of the signal coded by pseudo-random sequence;

a second mixer performing multiplication of the quadrature counts of the input signal by counts of a signal representing a mixture of the difference copy and the sequence of gating digital signals;

quadrature accumulators accumulating results of multiplication performed by the first and second mixers;

a device adjusting the delay of the exact copy of the signal coded by the pseudo-random sequence depending on an error signal from a discriminator output calculated on the basis of counts of the accumulators as: $I_{E-L+K}I_P + Q_{E-L+K}Q_P$, where I_{E-L+K}, Q_{E-L+K} are in-phase and quadrature components of results of correlation of the input signal with the signal representing a

mixture of the difference copy and the sequence of gating digital signals, I_P, Q_P are the in-phase and quadrature components of results of correlation of the input signal with the exact copy of the signal coded by pseudo-random sequence.

13. The device as claimed in claim 6, further comprising:

a first mixer performing multiplication of quadrature counts of the input signal by counts of the exact copy of the signal coded by pseudo-random sequence;

a second mixer performing multiplication of the quadrature counts of the input signal by counts of the difference copy;

a third mixer performing multiplication of the quadrature counts of the input signal by counts of the sequence of gating digital signals;

quadrature accumulators accumulating results of the multiplication performed by the first, second and third mixers; and

a device adjusting the delay of the exact copy of the signal coded by the pseudo-random sequence depending on an error signal from a discriminator output calculated on a basis of counts of the accumulators as: $I_{E-L}I_P + Q_{E-L}Q_P$, where I_{E-L}, Q_{E-L} are in-phase and quadrature components of results of correlation of the input signal with the difference copy, $I_K^2 + Q_K^2$ does not exceed a threshold of detection of a multipath signal, and I_K, Q_K are in-phase and quadrature components of results of correlation of the sequence of gating digital signals.

14. The device as claimed in claim 8 further comprising;

a first mixer performing multiplication of quadrature counts of the input signal by counts of the early copy;

a second mixer performing multiplication of the quadrature counts of the input signal by counts of the late copy;

a third mixer performing multiplication of the quadrature counts of the input signal by counts of the sequence of the gating digital signals;

quadrature accumulators accumulating results of the multiplication performed by the first, second and third mixers; and a device adjusting the delay of the exact copy of the signal coded by the pseudo-random sequence depending on an error signal from a discriminator output calculated on a basis of counts of the accumulators as: $I_E^2 + Q_E^2 - I_L^2 - Q_L^2 + I_K^2 + Q_K^2$, where I_E, Q_E are in-phase and quadrature components of results of correlation of the early copy, I_P, Q_P are in-phase and quadrature components of results of correlation of the late copy, and I_K, Q_K are the in-phase and quadrature components of results of correlation of the sequence of gating digital signals.--